

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018173**Date Inspected:** 12-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Xian Ping**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

OBG # Crossbeam CB18

This QA observed ZPMC qualified welding personnel identified as 054467 perform Shielded Metal Arc Welding (SMAW) Process on weld joint CB3002A-018-002. ZPMC Quality Control Personnel (QC) identified as Mr. Zheng zhi wei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2214-TC-U4b.

This QA observed ZPMC qualified welding personnel identified as 049769 perform Shielded Metal Arc Welding (SMAW) Process on weld joint CB3002A-018-002. ZPMC Quality Control Personnel (QC) identified as Mr. Zheng zhi wei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2214-TC-U4b.

This QA observed ZPMC qualified welding personnel identified as 053609 perform Flux Cored Arc Welding (FCAW) Process on weld joint CB3002K-004-303. ZPMC Quality Control Personnel (QC) identified as Mr. Zheng zhi wei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-TC-U4C-F.

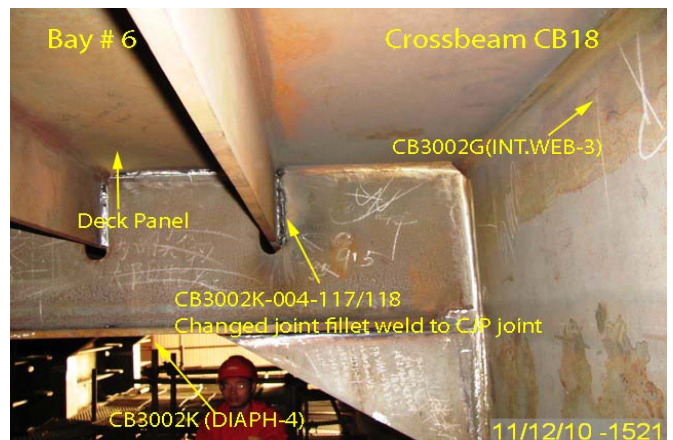
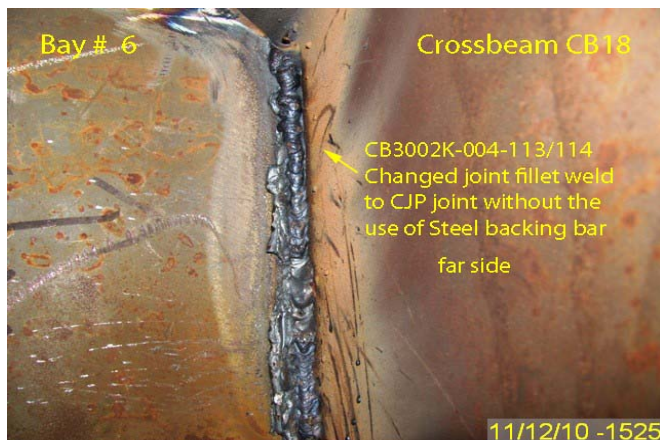
# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

This QA observed ZPMC qualified welding personnel identified as 053742 perform Flux Cored Arc Welding (FCAW) Process on weld joint CB3002J-002-303. ZPMC Quality Control Personnel (QC) identified as Mr. Zheng zhi wei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-TC-U4C-F.

During the Caltrans Quality Assurance in-process observations of the fabrication of Crossbeam CB18, this Quality Assurance Inspector (QA) discovered the following issues. ZPMC received Approval to change joint details from fillet welds to CJP welds. ZPMC did not appear to be following the guide lines of the "Notification for Engineers Review and approval" form approved on 11/10/10. ZPMC did not notify CT QA to inspect the joints for compliance prior to starting the work as specified on the Engineers Review and approval form. ZPMC did not appear to be following the guidelines of submittal 200R2 concerning excessive root opening repair. The welding has been performed without the use of Steel backing bar. The affected welds are identified as CB3002K-004-welds 117/118, 113/114, and CB3002J-001-welds 107/108. This QA notified ZPMC QC identified as Mr. Huang Min of this issue and that an incident report would be generated. For further information, please see the attached pictures below.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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### Summary of Conversations:

As mention above

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Sukanthan,Dhanasingh
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Hall,Steven
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QA Reviewer
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